

INTERNATIONAL SEARCH REPORT

PCT/IB 03/06213

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G11B7/095 G11B7/135

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 06, 22 September 2000 (2000-09-22) -& JP 2000 076679 A (RICOH CO LTD), 14 March 2000 (2000-03-14) cited in the application abstract	1-6
A	WO 02/21522 A (KONINKL PHILIPS ELECTRONICS NV) 14 March 2002 (2002-03-14) cited in the application page 10, line 13 -page 12, line 23 abstract	1-6
A	EP 0 357 323 A (SHARP KK) 7 March 1990 (1990-03-07) abstract; figure 1	1, 4

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

16 April 2004

Date of mailing of the international search report

07/05/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Lehnberg, C

INTERNATIONAL SEARCH REPORT

PCT/IB 03/06213

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 636 190 A (CHOI YANG-OH) 3 June 1997 (1997-06-03) column 1, line 65 -column 2, line 63; figure 3 abstract -----	1, 4

INTERNATIONAL SEARCH REPORT

PCT/IB 03/06213

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
JP 2000076679	A	14-03-2000	US	2003151999 A1		14-08-2003
			US	6545958 B1		08-04-2003
WO 0221522	A	14-03-2002	CN	1394335 T		29-01-2003
			WO	0221522 A1		14-03-2002
			EP	1320851 A1		25-06-2003
			US	2002118427 A1		29-08-2002
EP 0357323	A	07-03-1990	JP	2018571 C		19-02-1996
			JP	2068734 A		08-03-1990
			JP	7058559 B		21-06-1995
			DE	68916342 D1		28-07-1994
			DE	68916342 T2		15-12-1994
			EP	0357323 A2		07-03-1990
			US	5065380 A		12-11-1991
US 5636190	A	03-06-1997	KR	171076 B1		15-04-1999
			JP	2854264 B2		03-02-1999
			JP	7311973 A		28-11-1995